

# EAST Search History (18 pp.) ~~17~~

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1406	((376/338) or (376/339) or (376/340) or (376/441) or (376/442) or (376/443) or (376/444) or (376/462)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/02 13:50
L2	9	1 and spring and grid and conformal\$2 and (interior exterior edge inner inside outside peripheral periphery peripherally corner)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/02 13:51
L3	9	1 and spring and grid and conformal\$2 and (interior exterior edge inner inside outside peripheral periphery peripherally corner)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 13:51
S1	4	((("4224107") or ("6393087"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/31 09:19
S2	0	("773733.ap. ").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 15:28
S3	5	"773733".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:01
S4	2	("6542567").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:03
S5	6	((("6236702") or ("5139736") or ("4396573"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:03
S6	6	(US-6236702-\$ or US-5139736-\$ or US-4396573-\$).did. or (KR-99069102-\$ or US-5139736-\$ or EP-25395-\$).did.	USPAT; DERWENT	OR	OFF	2005/12/09 16:05

## EAST Search History

S7	0	wo-94025965\$-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:24
S8	1	wo-9425965\$-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:24
S9	6	((("6236702") or ("5139736") or ("4396573"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:28
S10	24	((("4,224,107") or ("6,393,087") or ("6,542,567") or ("5,303,276") or ("6,526,116") or ("4,879,090") or ("4,683,115") or ("4,666,663") or ("4,705,663") or ("5,666,389") or ("5,139,736") or ("6,167,105"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/09 16:32
S11	2	("6393087").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/10 22:30
S12	2	S11 and (grid spring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/10 22:31
S13	0	S11 and (grid adj spring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/10 22:30
S14	1	S11 and (grid near3 spring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/10 22:31
S15	1	"20050105677".pn. and "125"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 11:52

## EAST Search History

S16	2	"6393087".pn. and (rod pin)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:23
S17	2	"6393087".pn. and (coolant flow vane guide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:25
S18	2	"6393087".pn. and (coolant flow vane guide tap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:26
S19	0	"6393087".pn. and (tap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:32
S20	0	"6393087".pn. and ("33")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:33
S21	0	"6393087".pn. and (switch)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:33
S22	0	"6393087".pn. and (regulat\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 10:33
S23	1	"20050105677".pn. and taper\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 12:00
S24	0	"20050105677".pn. and (inner adj grid adj spring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 12:01
S25	2	"20050105677".pn. and (spring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 12:29

## EAST Search History

S26	2	"20050105677".pn. and (bent bend\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 12:48
S27	2	("5303276").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 12:48
S28	24	(US-6393087-\$ or US-4224107-\$ or US-5139736-\$ or US-5303276-\$ or US-6526116-\$ or US-6167105-\$ or US-5666389-\$ or US-4666663-\$ or US-4879090-\$ or US-4705663-\$ or US-4683115-\$).did. or (KR-2001001422-\$ or BE-850191-\$ or WO-9903108-\$ or US-5139736-\$ or EP-696377-\$ or GB-2272101-\$ or KR-99052336-\$ or WO-9901873-\$ or DE-4438493-\$ or DE-3334974-\$ or EP-304724-\$ or EP-184064-\$ or DE-3330850-\$).did.	USPAT; DERWENT	OR	OFF	2005/12/11 14:00
S29	0	("(roundrounded)and2").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:00
S30	6	(round rounded) and S28	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:00
S31	1196	((376/441) or (376/439) or (376/442) or (376/443) or (376/444) or (376/462)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:21
S32	2	S31 and (round rounded) near3 (vane tap protrusion)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:57
S33	2	("4683115").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:57

## EAST Search History

S34	2	("4705663").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/11 14:58
S35	4	((("4683115") or ("4705663"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/30 16:32
S36	5	"773733".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/30 16:56
S42	6	((("20030209723") or ("6693302") or ("5889295"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 14:18
S44	2	("20050105677").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 14:21
S45	2	("6393087").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 08:23
S46	32	(US-20050105677-\$ or US-20050062134-\$ or US-20050087758-\$).did. or (US-6393087-\$ or US-4224107-\$ or US-6236702-\$ or US-6542567-\$ or US-5139736-\$ or US-4396573-\$ or US-6526116-\$ or US-5666389-\$ or US-6167105-\$ or US-4683115-\$ or US-5303276-\$ or US-4879090-\$ or US-4705663-\$ or US-4666663-\$).did. or (KR-2001001422-\$ or BE-850191-\$ or WO-9903108-\$ or KR-99069102-\$ or US-5139736-\$ or EP-25395-\$ or EP-696377-\$ or WO-9901873-\$ or KR-99052336-\$ or GB-2272101-\$ or DE-4438493-\$ or DE-3334974-\$ or EP-304724-\$ or DE-3330850-\$ or EP-184064-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/08/30 14:21

## EAST Search History

S47	17	support\$4 near4 (fuel adj rod) and S46	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/30 14:24
S48	14	support\$4 near4 (fuel adj rod) and (compartment cell) and S46	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/30 14:57
S49	10	S48 and (bent bend\$3)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/30 15:03
S50	669	((376/441) or (376/442)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 15:04
S51	481	S50 and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 15:04
S52	2	("5303276").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 18:47
S53	2	("6526116").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/30 18:47
S54	1	conformal and "773733".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/31 09:20
S55	1	(US-20050105677-\$).did.	US-PGPUB	OR	OFF	2006/08/31 10:20
S56	1	S55 and "41"	US-PGPUB	OR	OFF	2006/08/31 16:17
S57	125	contact adj spring and spring adj (strength constant)	US-PGPUB	OR	OFF	2006/08/31 16:18
S58	558	contact adj spring and spring adj (strength constant)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/31 16:18

## EAST Search History

S59	4	contact adj spring and spring adj (strength constant) and "376"/\$7. ccls. and nuclear adj fuel adj rod	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:20
S60	0	contact adj spring with (spring adj (strength constant)) same peripher\$2 and "376"/\$7.ccls. and nuclear adj fuel adj rod	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:21
S61	0	contact adj spring with (spring adj (strength constant)) same (outer inner peripher\$2) and "376"/\$7. ccls. and nuclear adj fuel adj rod	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:22
S62	0	contact adj spring with (spring adj (strength constant)) same (outside inside outer inner peripher\$2) and "376"/\$7.ccls. and nuclear adj fuel adj rod	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:22
S63	0	contact adj spring with (spring adj (strength constant)) same (outside inside outer inner peripher\$2) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:23
S64	2	spacer adj grid with (spring adj (strength constant)) same (outside inside outer inner peripher\$2) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:24
S65	6	spacer adj grid with (spring adj (strength constant)) and "376"/\$7. ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:25

## EAST Search History

S66	7	(contact adj spring spacer adj grid) with (spring adj (strength constant)) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:29
S67	0	(contact adj spring spacer adj grid) with (outside inside) with (stronger weaker) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:30
S68	0	(contact adj spring spacer adj grid spring adj constant) with (outside inside) with (stronger weaker) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:39
S69	0	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 internal outside inside) with (stronger weaker) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:41
S70	116	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 internal outside inside) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:41
S71	138	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 outside outer) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:42
S72	38	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 outside outer) with (interior inside inner) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:42



## EAST Search History

S73	0	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 outside outer) with (interior inside inner) with (strenght stronger weaker weak) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:43
S74	4	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 outside outer) with (interior inside inner) with (strength stronger weaker weak) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:44
S75	38	(contact adj spring spacer adj grid spring adj constant) with (peripher\$2 outside outer) with (interior inside inner) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:46
S76	38	(contact adj spring spacer adj grid spring adj constant grid adj spring) with (peripher\$2 outside outer) with (interior inside inner) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 16:53
S77	103	spring adj (constant strength) and "376"/\$7.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 17:17
S78	603	(376/442).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/31 17:26
S79	0	("24andspringnear1(strengthconstant)").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/31 17:27
S80	25	S78 and (spring near1 (strength constant))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 17:35

## EAST Search History

S81	32	S78 and (spring near1 (strength constant stiffness))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 17:36
S82	11	S78 and (spring near1 (strength constant stiffness)).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/31 17:36
S83	68	(US-20050105677-\$ or US-20050087758-\$ or US-20050062134-\$ or US-20030215049-\$).did. or (US-5303276-\$ or US-6526116-\$ or US-4224107-\$ or US-6393087-\$ or US-6542567-\$ or US-6236702-\$ or US-4396573-\$ or US-5139736-\$ or US-4879090-\$ or US-6167105-\$ or US-5666389-\$ or US-4683115-\$ or US-4705663-\$ or US-4666663-\$ or US-5577081-\$ or US-5188798-\$ or US-5035853-\$ or US-5024807-\$ or US-4885127-\$ or US-5209899-\$ or US-6744843-\$ or US-6744842-\$ or US-6728329-\$ or US-6707872-\$ or US-6650723-\$ or US-6608881-\$).did. or (US-6522710-\$ or US-6519309-\$ or US-6421407-\$ or US-6400788-\$ or US-6272197-\$ or US-6144716-\$ or US-6088420-\$ or US-5875223-\$ or US-5740218-\$ or US-5638416-\$ or US-5625657-\$ or US-5546437-\$ or US-5493590-\$ or US-5444748-\$ or US-5440599-\$ or US-5434898-\$ or US-5420902-\$ or US-5371769-\$ or US-5367549-\$ or US-5363422-\$ or US-5361288-\$ or US-6310932-\$ or US-3886038-\$).did. or (GB-2272101-\$ or WO-9901873-\$ or KR-2001001422-\$ or BE-850191-\$ or WO-9903108-\$ or US-5139736-\$ or KR-99069102-\$ or EP-696377-\$ or EP-25395-\$ or KR-99052336-\$ or EP-184064-\$ or DE-4438493-\$ or DE-3334974-\$ or EP-304724-\$ or DE-3330850-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/08/31 17:39
S84	3	S83 and spring near2 (constant stiffness strength).clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 17:41

## EAST Search History

S85	15	S83 and spring near2 (constant stiffness strength)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 17:41
S86	17	S83 and spring near2 (strong\$3 constant stiffness strength)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 17:41
S87	17	S83 and spring near2 (weak\$3 strong\$3 constant stiffness strength)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 17:43
S88	0	spring near2 (weak\$3 strong\$3 constant stiffness strength) and spacer adj graid	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 17:43
S89	59	spring near2 (weak\$3 strong\$3 constant stiffness strength) and (grid adj spring spacer adj grid)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 18:57
S90	4	grid adj spring near6 (stiffness stiff stiffer)	US-PGPUB; USPAT; DERWENT	OR	ON	2006/08/31 18:58
S91	0	edge near4 (fuel adj rod spring) and (376/338.ccls. 376/339.ccls. 376/340.ccls. 376/341.ccls. 376/342.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 07:55
S92	3	edge with (fuel adj rod spring) and (376/338.ccls. 376/339.ccls. 376/340.ccls. 376/341.ccls. 376/342.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 07:53
S93	374	(376/338.ccls. 376/339.ccls. 376/340.ccls. 376/341.ccls. 376/342.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 07:55
S94	108	S93 and (periphery peripheral edge outer exterior)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 07:56
S95	27	S93 and (periphery peripheral edge outer exterior) and spring	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 07:57
S96	26	S93 and (periphery peripheral edge outer exterior) and spring and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 08:10

## EAST Search History

S97	3	S93 and (spacer adj grid) and spring and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 08:10
S98	10	S93 and (spacer adj grid fuel adj assembly fuel adj rod) and spring and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 08:12
S99	16	S93 and (spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 10:02
S10 0	3904	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 10:02
S10 1	259	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring near6 (constant stiffness strength) and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 10:11
S10 2	211	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring near6 (constant stiffness strength) and @ad<"20040206" and nuclear	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 10:28
S10 3	176	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring near6 (constant stiffness strength) and @ad<"20040206" and nuclear and "376"/\$7.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 11:27
S10 4	91	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and spring near6 (constant stiffness strength) and @ad<"20040206" and nuclear and "376"/\$7.ccls. and "34" and "38"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 11:44
S10 5	225	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and (spring near6 (constant stiffness strength) or resilience) and @ad<"20040206" and nuclear and "376"/\$7.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 11:46

## EAST Search History

S10 6	119	(spacer adj grid fuel adj assembly fuel adj rod fuel adj element grid adj spring) and (spring near6 (constant stiffness strength) or resilience) and @ad<"20040206" and nuclear and ("376"/33\$1.ccls. 376/44\$1.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 11:46
S10 7	114	(resilience stiffness strength constant) near6 spring and (376/43\$1.ccls. 376/44\$1.ccls.) and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 17:38
S10 8	90	(resilience stiffness strength constant) near4 spring and (376/43\$1.ccls. 376/44\$1.ccls.) and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 17:39
S10 9	21	(resilience stiffness strength constant) near4 spring.ti,ab,clm. and (376/43\$1.ccls. 376/44\$1.ccls.) and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 17:48
S11 0	24	(resilience stiffness strength constant) near6 spring.ti,ab,clm. and (376/43\$1.ccls. 376/44\$1.ccls.) and @ad<"20040206"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 17:48
S11 1	3	((resilience stiffness strength constant) near6 spring.ti,ab,clm. and (376/43\$1.ccls. 376/44\$1.ccls.) and @ad<"20040206") not S109	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 20:15
S11 2	2	"5303276".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 20:59
S11 3	2	("6,526,116").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/01 20:59
S11 4	50	(376/33\$1.ccls. 376/44\$1.ccls.) and swirl\$3 same vane	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:04
S11 5	1	(US-20050105677-\$).did.	US-PGPUB	OR	OFF	2006/09/01 21:16

## EAST Search History

S11 6	1	(US-20050105677-\$).did. and guide near20 center	US-PGPUB	OR	OFF	2006/09/01 21:18
S11 7	2	(US-20050105677-\$).did. and guide adj tube	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:18
S11 8	502	guide adj tube and (376/43\$1.ccls. 376/44\$1.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:19
S11 9	5	guide adj tube near4 (vane tap) and (376/43\$1.ccls. 376/44\$1. ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:30
S12 0	28	guide near4 (vane tap) and (376/43\$1.ccls. 376/44\$1.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:43
S12 1	290	(dimple guide near4 (vane tap)) and (376/43\$1.ccls. 376/44\$1. ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:43
S12 2	8	(dimple guide near4 (vane tap)) near10 swirl\$3 and (376/43\$1. ccls. 376/44\$1.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:54
S12 3	1	guide adj tap and yoon.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 21:55

## EAST Search History

S12 4	35	(guide adj tap dimple) and yoon.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 22:20
S12 5	1	(US-20050105677-\$).did.	US-PGPUB	OR	OFF	2006/09/01 22:14
S12 6	1	S125 and guide adj tap and (bend bending bent) and (center centre)	US-PGPUB	OR	ON	2006/09/01 22:15
S12 7	22	(bent near10 center) and yoon.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 22:20
S12 8	4	(bent near10 center near10 (spacer adj grid)) and yoon.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/01 22:21

## EAST Search History

S12 9	72	(US-20050105677-\$ or US-20050087758-\$ or US-20050062134-\$ or US-20030215049-\$).did. or (US-6393087-\$ or US-4224107-\$ or US-6542567-\$ or US-6236702-\$ or US-5139736-\$ or US-4396573-\$ or US-6526116-\$ or US-5666389-\$ or US-6167105-\$ or US-5303276-\$ or US-4705663-\$ or US-4879090-\$ or US-4666663-\$ or US-4683115-\$ or US-6744843-\$ or US-6744842-\$ or US-6728329-\$ or US-6707872-\$ or US-6650723-\$ or US-6522710-\$ or US-6421407-\$ or US-6310932-\$ or US-6088420-\$ or US-5875223-\$ or US-6608881-\$ or US-5740218-\$).did. or (US-6519309-\$ or US-6400788-\$ or US-5638416-\$ or US-5625657-\$ or US-5577081-\$ or US-6272197-\$ or US-5546437-\$ or US-6144716-\$ or US-5493590-\$ or US-5444748-\$ or US-5434898-\$ or US-5420902-\$ or US-5371769-\$ or US-5367549-\$ or US-5440599-\$ or US-5209899-\$ or US-5363422-\$ or US-5361288-\$ or US-5188798-\$ or US-5024807-\$ or US-5035853-\$ or US-4885127-\$ or US-4489038-\$ or US-4135972-\$ or US-3886038-\$ or US-6845138-\$ or US-3787286-\$).did. or (BE-850191-\$ or KR-2001001422-\$ or WO-9903108-\$ or KR-99069102-\$ or US-5139736-\$ or EP-25395-\$ or EP-696377-\$ or DE-4438493-\$ or KR-99052336-\$ or WO-9901873-\$ or GB-2272101-\$ or EP-304724-\$ or EP-184064-\$ or DE-3334974-\$ or DE-3330850-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/09/01 23:30
S13 0	3	S129 and spring adj constant	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/09/01 23:32
S13 1	0	S129 and "each" near5 spring	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/09/01 23:33
S13 2	0	S129 and "each" near5 spring	US-PGPUB; USPAT; DERWENT	OR	ON	2006/09/01 23:33



## EAST Search History

S13 3	4	inner near6 outer near6 cell and 376/442.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/02 00:05
S13 4	6	inner near6 outer and spring near4 (constant stiffness strength) and 376/442.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/02 00:12
S13 5	33	spring near2 (constant stiffness strength) and 376/442.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/02 00:12
S13 6	14	spring near1 (constant stiffness strength) with (peripheral\$2 outer inner inside outside) and "376"/\$7.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 08:00
S13 7	4	spring near1 (constant stiffness strength) with edge and "376"/\$7.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 08:01
S13 8	1	(US-20050105677-\$).did.	US-PGPUB	OR	OFF	2006/09/02 09:16
S13 9	1	S138 and guide adj tap	US-PGPUB	OR	ON	2006/09/02 09:59
S14 0	1	(376/43\$1.ccls. 376/44\$1.ccls.) and zircaloy with spring near1 (constant strenth stiffness stiff)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 10:02
S14 1	48	(376/43\$1.ccls. 376/44\$1.ccls.) and spring near1 (constant strenth stiffness stiff)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 11:10
S14 2	2	"376"/\$7.ccls. and spring near1 (constant strenth stiffness stiff) with (zircaloy zirconium)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 11:13

## EAST Search History

S14 3	128	"376"/\$7.ccls. and spring with (zircaloy zirconium)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/02 11:13
S14 4	25	(US-5666389-\$ or US-5139736-\$ or US-6393087-\$ or US-4224107-\$ or US-6542567-\$ or US-6526116-\$ or US-5303276-\$ or US-4879090-\$ or US-4683115-\$ or US-6167105-\$ or US-4705663-\$ or US-4666663-\$).did. or (KR-2001001422-\$ or BE-850191-\$ or US-5139736-\$ or WO-9903108-\$ or EP-696377-\$ or KR-99052336-\$ or DE-4438493-\$ or GB-2272101-\$ or EP-304724-\$ or DE-3334974-\$ or DE-3330850-\$ or WO-9901873-\$ or EP-184064-\$).did.	USPAT; DERWENT	OR	OFF	2006/09/02 11:19
S14 5	6	S144 and zircaloy	USPAT; DERWENT	OR	OFF	2006/09/02 11:21
S14 6	6	S144 and zircaloy and spring	USPAT; DERWENT	OR	ON	2006/09/02 12:01
S14 7	1	S144 and zircaloy with (neutron adj flux)	USPAT; DERWENT	OR	ON	2006/09/02 12:02
S14 8	1	S144 and zircaloy with (neutron adj (damage flux))	USPAT; DERWENT	OR	ON	2006/09/02 12:02
S14 9	1	S144 and zircaloy with (neutron adj (irradiation damage flux))	USPAT; DERWENT	OR	ON	2006/09/02 12:02
S15 0	4	S144 and zircaloy with (neutron)	USPAT; DERWENT	OR	ON	2006/09/02 12:10
S15 1	0	S144 and zircaloy with (neutron) with inconel	USPAT; DERWENT	OR	ON	2006/09/02 12:10
S15 2	2	S144 and zircaloy with (neutron) same inconel	USPAT; DERWENT	OR	ON	2006/09/02 13:49